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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,773	10/30/2000	Tara Lynn Alvarez	2-4-3	7026

22046   7590   06/16/2004

LUCENT TECHNOLOGIES INC.
DOCKET ADMINISTRATOR
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EXAMINER
SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 06/16/2004   3

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/699,773	ALVAREZ ET AL.
	Examiner	**Art Unit**
	Chirag G Shah	2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 October 2000</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 October 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>2</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1 and 2 rejected under 35 U.S.C. 102(e) as being anticipated by Proctor et al.

(U.S. Patent No. 6,205,125).

Referring to claims 1, Proctor et al discloses in figures 1, 4, column 2, lines 50 to column

3 lines 42 and in column 5, lines 28-55 of a method for transmitting DSI and NDSI

(transmitting packets from NA 50, 52 and 54) over **a communication link (17, 19 and 21)** of

a communication network **(as disclosed in figure 1)**, the method comprising the step of:

transmitting an initial DSI after applying a delay to the initial DSI where such delay is based on

parameters of received DSI (disclosed in **figure 4, claims 1, 6** and **abstract,** where a **temporal**

offset processor 330 received transmission delay information form a delay analyzer 315 and soft

handoff state information from a control processor, **this information is used to determine a**

temporal offset for packets of information, the temporal information is used by a network

arbiter 350 to determine when the associated packet should be transmitted in time.

Proctor discloses in claim 6 that upon inserting into first packet the temporal offset, then

transmission takes place and as further disclosed in claim 12 the NA determines a network

delay offset which is based on a user configurable parameter) as claim.

Referring to claim 2, Proctor et al discloses in column 5, lines 13-55 and claim1 that the

delay is based on a determined periodicity (the timing relationship between consecutive (speech)

packets) of the received DSI as claim.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 3-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor et al in

view of Ellis et al (U.S. Patent No. 5,4973,71).

Referring to claim 3, Proctor et al discloses in column 3, lines 28-43 and in column 4,

lines 15-32 of transmitting delay sensitive packets and non delay sensitive packets over a

communications link. Proctor et al fails to disclose that the delay is further based on a defined

length NDSI being transmitted. Ellis et al teaches of an efficient packet transport system for

mixed traffic in which a packet fragmentation protocol allows traffic of difference classes to

occupy a single physical link. Ellis et al discloses in column 7, lines 54 to column 8, lines 40

that since packets within the broadband network are of fixed or variable length, the delay is

based on a defined length such as 16Kbytes of low priority data (data-delay insensitive) being

transmitted. Therefore, it would have been obvious to one of ordinary skills in the art to modify

the teachings of Proctor et al to include the delay based on defined length NDSI being

transmitted as taught by Ellis et. al in order to accurately account for and alter non-sensitive

traffic causing delay in a coexisting link to efficiently transport delay sensitive traffic with

minimal switching and assembly delays.

Referring to claim 4, Proctor et al discloses of transmitting DSI in column 2, lines 50 to

column 3, lines 43 comprises transmitting NDSI in a non-fragmented manner where there are no

DSI to be transmitted (as disclosed in column 5, lines 28-61 that NA 50, 52 and 54 utilize the

temporal offset associated with each packet to determine the estimate of the time of transmission

of the packets into network communication link and that QoS information is translated into a

communication type offset according to service specific requirements signifying that delay

insensitive packets are transmitted when no delay sensitive information packet exists);

monitoring for any received DSI (selector 34 receives speech packets from vocoder 30 and

broadcast any received DSI (speech packet to the appropriate NA as disclosed in column 4, lines

46-67); determining whether a received DSI is an initial DSI (NA 50 and 52 use the call state to

determine the temporal offset to determine if the received speech packet is the first packet as

described in figure 1); transmitting the received DSI as per its periodicity when such received

DSI is not an initial DSI (as disclosed in column 5, lines 13 to 55, NA utilize the temporal offset

associated with each packet to determine the time of transmission of the packet into network

communication links). Proctor et al fails to disclose performing a fragmentation operation for

NDSI to be transmitted or for NDSI being transmitted. Ellis et al discloses in claim 5 and

respective portions of the specification of the fragmentation operation is performed for delay

insensitive packet to be transmitted (higher priority packets (DSI) in a higher priority buffer

interrupts at any time the transmission of a lower priority packet from a lower priority buffer by

fragmenting the lower priority packet into one or more packets fragment of any number of

bytes). Therefore, it would have been obvious to modify the teachings of Proctor et al to include

the teachings of performing a fragmentation operation for NDSI as taught by Ellis et al in order

to give delay sensitive traffic priority over non-sensitive traffic.

Referring to claim 5, Proctor et al discloses in column 3, lines 28-43 and in column 4,

lines 15-32 of transmitting delay sensitive packets and non delay sensitive packets over a

communications link. Proctor et al fails to disclose of performing a dynamic fragmentation

operation. Ellis et al discloses in claim 5 and respective portions of the specification of the

fragmentation operation is performed is a dynamic fragmentation operation (higher priority

packets (DSI) in a higher priority buffer interrupts at any time the transmission of a lower

priority packet from a lower priority buffer by fragmenting the lower priority packet into one or

more packets fragment of any number of bytes). Therefore, it would have been obvious to

modify the teachings of Proctor et al to include the teachings of performing a fragmentation

operation for NDSI as taught by Ellis et al in order to give delay sensitive traffic priority over

non-sensitive traffic.

Referring to claim 6, Proctor et al discloses in column 3, lines 6-43 and column 5, lines

13-55 and in figure 1 the step of determining whether a received DSI (in the NA) is an initial

DSI based on information received from communication equipment (of figure 1) as claim.

Referring to claim 7, Proctor et al discloses in column 5, lines 13-55 and claim1 the step

of transmitting the DSI as per its periodicity is based on information received from

communication equipment (of figure 1) as claim.

Referring to claims 8 and 10, Proctor et al discloses in figure 1 that the communication

equipment is an IAD (NA) as claim.

Referring to claims 9 and 11, Proctor et al discloses in figure 1 that the communication

equipment is subscriber equipment (mobile) as claim.

Referring to claim 12, Proctor et al discloses in column 3, lines 44 to column 4, lines 32

and figure 1 discloses the step of maintaining a list of transmission time for received initial DSI

(determining the time of transmission of the first, second and additional packets based on the

type of information contained in the first packet); establishing a transmission time for each

received initial DSI (determining the time of transmission for each received speech packet); and

updating the list when an initial DSI is received (upon receiving the first speech packet, the list

of packets is updated as claim.

Referring to claim 13, Proctor discloses an apparatus (NA) for transmitting DSI and

NDSI over a communication link 17, 19 and 21of a communication network (figure 1) where the

apparatus (NA) applies a delay to received initial DSI based on a determined periodicity of the

received DSI (as discloses in column 5, lines 13-55 and claim1 that the delay is based on a

determined periodicity (the timing relationship between consecutive (speech) packets) of the

received DSI). Proctor et al fails to disclose a defined length of NDSI being transmitted. Ellis et

al teaches of an efficient packet transport system for mixed traffic in which a packet

fragmentation protocol allows traffic of difference classes to occupy a single physical link. Ellis

et al discloses in column 7, lines 54 to column 8, lines 40 that since packets within the broadband

network are of fixed or variable length, the delay is based on a defined length such as 16Kbytes

of low priority data (data-delay insensitive) being transmitted. Therefore, it would have been

obvious to one of ordinary skills in the art to modify the teachings of Proctor et al to include the

delay based on defined length NDSI being transmitted as taught by Ellis et. al in order to

accurately account for and alter non-sensitive traffic causing delay in a coexisting link thus

efficiently transporting delay sensitive traffic with minimal switching and assembly delays.

Referring to claim 14, Proctor et al discloses in figure 1 of apparatus (NA) configured as

an IAD coupled to subscriber equipment (22a) and to an access network 10 as claim.

Referring to claim 15, Proctor et al discloses in figure 1 of an apparatus (NA) configured

as part of host equipment (Mobile Station 22a) where such host equipment is coupled to an

access network 10 (via link 17, 19 and 21) and to a packet based communication network (as

disclosed in column 1, lines 13-33 and illustrated in figure 1).

Any response to this action should be mailed to:

> Commissioner of Patents and Trademarks
> Washington, D.C. 20231

Or faxed to:

> (703)305-3988, (for formal communications intended for entry)

Or:

> (703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).
Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The

examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
June 3, 2004

Ajit Patel
Primary Examiner